

## **LISTING OF THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

16. (Presently Amended) An image compression system, comprising:  
an image source providing an image, the image having a plurality of pixels, each of the pixels having a finite number of bits;  
a compressor coupled to the image source, the compressor configured to generate a compressed image based on an integer wavelet transform derived using a technique selected from a lifting scheme and a correction method, wherein the integer wavelet transform used modular arithmetic and wavelet coefficients of the integer wavelet transform have a finite number of bits that are no greater in number than the highest count for the number of bits for any of the pixels of the image.
17. (Original) The image compression of claim 16, wherein the compressor quantizes a wavelet transformed image to produce the compressed image.
18. (Original) The image compression system of claim 16, wherein the compressor entropy encodes a quantized image to produce the compressed image.
19. (Original) The compression system of claim 16, wherein the compressor performs a color transformation to produce the compressed image.

20. (Presently Amended) An image decompression system, comprising:  
a compressed image source providing a compressed image;  
a decompressor coupled to the compressed image source, the decompressor configured to generate a decompressed image based on an integer wavelet transform derived using a technique selected from a lifting scheme and a correction method, wherein the integer wavelet transform used modular arithmetic and wavelet coefficients of the integer wavelet transform have a finite

number of bits that are no greater in number than a finite number of bits for any of the [[as]] pixels of the decompressed image.

21. (Presently Amended) A computer-readable memory storing a computer program for directing a computer system to perform image compression, wherein the computer program implements the steps for performing integer wavelet transformation of an input image having a finite number of bits per pixel, quantizing the wavelet transformed image, applying entropy coding to the quantized image, and outputting a file that includes the entropy coded image, wherein the integer wavelet transform used modular arithmetic and wavelet coefficients of the wavelet transformed image have no more finite number of bits than do any of the pixels of the input image.